Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	§	
	§	
Inquiry Concerning 911 Access, and Location	§	GN Docket No. 17-239
in Enterprise Communications Systems	§	
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	§	

INITIAL COMMENTS OF THE TEXAS 9-1-1 ENTITIES

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The Texas 9-1-1 Alliance,[1] the Texas Commission on State Emergency Communications,[2] and the Municipal Emergency Communication Districts Association[3] (collectively, the "Texas 9-1-1 Entities") respectfully submit the following initial comments on the Federal Communication Commission's (the "Commission's") Notice of Inquiry ("NOI") in the above-referenced proceeding.[4] In the NOI, the Commission seeks comments on the 9-1-1 capabilities of Multi-Line Telephone Systems ("MLTS").[5]

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[1] The Texas 9-1-1 Alliance is an interlocal cooperation entity composed of 26 Texas emergency communication districts with E9-1-1 service and related public safety responsibility for more than approximately 63% of the population of Texas. These emergency communication districts were created pursuant to Texas Health and Safety Code Chapter 772 and are defined under Texas Health and Safety Code Section 771.001(3)(B).

[2] The Texas Commission on State Emergency Communications ("CSEC") is a state agency created pursuant to Texas Health and Safety Code Chapter 771, and by statute is the state program authority on emergency communications. CSEC's membership includes representatives of the Texas 9-1-1 Entities and the general public, and directly oversees and administers the Texas state 9-1-1 program under which 9-1-1 service is provided in 206 of Texas' 254 counties, covering approximately two-thirds of the state's geography and one–fourth of the state's population.

[3] The Municipal Emergency Communication Districts Association ("MECDA") is an association of 26 municipal emergency communication districts, as defined under Texas Health and Safety Code Section 771.001(3)(A), that are located primarily in the Dallas-Fort Worth area.

[4] *See Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communication Systems*, PS Docket No. 17-239, Notice of Inquiry (rel. Sept. 26, 2017) (av*ailable at* https://ecfsapi.fcc.gov/file/09263029314893/FCC-17-125A1.pdf).

[5] In the NOI, the Commission indicates that use of the term MLTS may not be sufficient and instead uses the term Enterprise Communications System ("ECS"). The Commission's rationale is that historically the term "MLTS" has been associated with circuit-switched telephony. NOI at ¶2, footnote 2. However, 47 U.S.C. § 1471 defines "MLTS" to clearly include IP-based MLTS, and 47 U.S.C. § 1471 is referenced as the MLTS definition in the pending federal version of Kari's Law. Section 1471 is part of the federal Next Generation 9-1-1 Advancement Act of 2012 (the "Act"), and section 6504 of the Act, *Requirements for Multi-Line Telephone Systems*, required (1) the Administrator of General Services in conjunction with the 9-1-1 Implementation Coordination Office to submit a report to Congress identifying the 9-1-1 capabilities of MLTS used by federal agencies and in all federal buildings and properties; and (2) the Commission to issue a public notice for comment on the feasibility of MLTS manufacturers including

I. Introduction and Summary of Initial Comments

Starting in the early 1990s, at various times MLTS issues have risen to the forefront of the attention of legislative, regulatory, industry best practices, and public education matters. The most recent example of that is the enactment of various state and local versions of Kari's Law, and the pending federal version of Kari's Law, in light of that tragedy. The major issues related to MLTS continue to involve meeting consumer expectations, direct access to 9-1-1, routing of 9-1-1 calls, and the precision of the location information for 9-1-1 calls, most of which were also raised back in 1994, in Commission Docket 94-102. While wireless calls today represent 75% or more of 9-1-1 calls (recognizing a percentage of wireless is non-service initialized), business MLTS still remains a material amount of non-wireless 9-1-1 calls and will likely remain a material amount even after full transition of the Time-Division Multiplexing ("TDM") public switched telephone network (PSTN) to Internet Protocol ("IP"). Thus, it is appropriate and timely for the Commission to reconsider these same MLTS issues in light of the transition from TDM to IP. Moreover, these MLTS issues directly relate to the Commission's regulation of 9-1-1 responsibilities for Interconnected VoIP services nationwide.[6] Accordingly, in these initial comments, the Texas

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mechanisms in their MLTS to provide sufficiently precise location of a 9-1-1 caller, specifically to include comment on NENA's Technical Requirements Document on Model Legislation E9-1-1 for Multi-Line Telephone Systems. Accordingly, the term MLTS rather than ECS is used in these comments to avoid confusion and for consistency with 47 U.S.C. § 1471, and respectfully urge the Commission to do likewise, or alternatively clarify any distinctions between ECS and MLTS. Our request is not simply pro forma. Texas' Kari's Law, (See, Texas Health and Safety Code Ann. Section 771A) uses the term "multiline telephone system," and to inject a new term may only add to the confusion of business owners/MLTS customers. Even long-time 9-1-1 professionals might find it difficult to answer if a business owner were to ask, "do I have an MLTS as defined in 47 U.S.C. § 1471 or do I have an ECS as referred to in the NOI, and what's the difference between the two, if any?"

[6] The Commission's purported IP and Interconnected VoIP E9-1-1 jurisdiction has materially changed the federal and state 9-l-1 regulatory framework landscape for IP and VoIP matters, and MLTS gets more and more potentially intertwined with IP and VoIP matters with each passing day. At least approximately half of state legislatures have enacted provisions attempting to follow the Commission's desired intent to have a comprehensive federal jurisdictional regulatory framework for IP and VoIP matters. Moreover, as TDM voice services becomes less and less the sole connectivity option for MLTS, the Commission role to facilitate MLTS grows larger and larger. It is an appropriate threshold matter for the Commission to determine where the Interconnected VoIP provider's 9-1-1 responsibilities begin and end under the Commission's rule and where the 9-1-1 responsibilities begin and end for the MLTS customer. *See also*, Texas 9-1-1 Entities initial and reply comments to the Commission's 2012 MLTS public notice (available, respectively at https://ecfsapi.fcc.gov/file/7021983421.pdf and at https://ecfsapi.fcc.gov/file/7021997050.pdf).

9-1-1 Entities seek to provide responsive information to the Commission's questions in the NOI on 9-1-1 capabilities of MLTS.

II. 9-1-1 Authority Responsive Sample Data Based on Wireline and VoIP Classes of Service

The Commission seeks information on the type and number of subscribers, business, enterprises, and other entities employing legacy and IP-based MLTS, as well as the total number of individual telephone numbers associated with MLTS and the percentage of 9-1-1 traffic originating from MLTS.[7] One source of such data is based on National Emergency Number Association (NENA) Classes of Service ("CoS") of 9-1-1 calls presented to PSAPs.[8] While data on 9-1-1 call CoS can potentially provide some relevant information that is responsive to the Commission's questions, it has several limitations that should be recognized and understood. First, some 9-1-1 calls do not have an identified CoS, or may have a default CoS, resulting in some inaccuracy in the data. Second, some CoS classification differences between a regular wireline business account and a MLTS business account may not always be consistently reported or followed, or the MLTS may use a regular wireline business line for 9-1-1 calls. Third, with regard to Interconnected VoIP service from a VoIP Positioning Center ("VPC"), most areas nationwide other than Texas do not utilize the NENA CoS of VRES and VBUS and may instead only use a single default VOIP CoS.[9] With those caveats, Attachment A of these initial comments provides summarized data by CoS for the years 2015, 2016, and 2017 (through September) from the Capital Area Emergency Communication District, which serves ten counties in central Texas and the City

[7] NOI at ¶19.
[8] *See*, NENA, 02-010 v9, Data Formats For ALI Related Data Exchange, MSAG & GIS at p. 13 of 103 (available at https://c.ymcdn.com/sites/www.nena.org/resource/resmgr/Standards/NENA_02-010_v9_Data_Formats_.pdf).
[9] *See also*, the initial comments filed early in this proceeding by the Colorado Public Utilities Commission ("COPUC") at p. 2 ("The COPUC does not have information regarding the total number of ECS subscribers, and cautions the Commission that the data provided in the 2016 National 911 Progress Report may be misleading in this regard.") (available at https://ecfsapi.fcc.gov/file/1113184553096/Enterprise%20911%20Comments.pdf).

of Austin and more than 2.1 million people (7.7% of the Texas population). Attachment B to these comments provides summarized data by CoS for the year 2017 (through October) from the Bexar Metro 9-1-1 Network, which serves three counties in south central Texas and the City of San Antonio and more than 2.2 million people (7.9% of the Texas population). This sample data on CoS indicates that legacy business wireline (CoS BUSN + PBX) and business VoIP (CoS VBUS + plus some portion of non-specific VOIP) are still a noteworthy amount compared to legacy residential wireline (CoS RESD) and residential VoIP (CoS VRES).

III. Consumer Expectations, Direct Access, Routing, and Precision of Location Information

In the NOI, the Commission seeks to examine the capabilities of MLTS to meet consumer expectations, direct 9-1-1 access, routing, and automatic location.[10] As discussed earlier with regard to the sample CoS data, because business MLTS is still a noteworthy amount compared to legacy residential wireline (CoS RESD) and residential VoIP (CoS VRES), these business MLTS issues are not going away and should be addressed more proactively.

A. Consumer Expectations

As the Commission stated in the NOI, the emergency number 9-1-1 is one of the most ubiquitous fixtures in the American public safety landscape.[11] Consumers expect that all of their 9-1-1 emergency calls will be quickly routed to the designated PSAP and that help will be promptly dispatched to the caller's location. For consumers who use a MLTS to dial 9-1-1, the expectation of 9-1-1 service being accessible from the MLTS has been and remains axiomatic.

The Commission's 2005 Report and Order requiring Interconnected VoIP Service Providers to provide 9-1-1 service was at least partly the result of incidents in which individuals

[10] NOI at ¶2.
[11] NOI at ¶34.

with a clear expectation regarding the availability of 9-1-1 service unsuccessfully attempted to reach emergency services by dialing 9-1-1. Recent state and local versions of Kari's Law, and the pending federal version are another example of the expectation being addressed after a truly tragic unsuccessful attempt to reach emergency services by dialing 9-1-1. Consumers fully expect that when they dial 9-1-1 from a MLTS it will be successful, that their 9-1-1 call will be quickly routed to the designated PSAP, that help will be promptly dispatched to their location, and that any technical issues would have been worked out, tested and in place well before they need to make that 9-1-1 emergency call.

B. Direct Access

With regard to direct access to 9-1-1, in 2015 the Texas Legislature enacted its version of Kari's Law, codified as Texas Health and Safety Code Subchapter 771A, which provides in part:

> Notwithstanding any other law, a business service user that owns or controls a telephone system or an equivalent system that uses Internet Protocol enabled service and provides outbound dialing capacity or access shall configure the telephone system or equivalent system to allow a person initiating a 9-1-1 call on the system to directly access 9-1-1 service by dialing the digits 9-1-1 without an additional code, digit, prefix, postfix, or trunk-access code."[12]

The Texas version of Kari's Law does permit one-year waivers, which can be resubmitted in subsequent years. Related to the one-year waivers, CSEC Rule 251.16 provides, in relevant part:

> A business service user shall be granted a one-year waiver (September 1 – August 31) of the requirements of Kari's Law and this rule upon submission of an affidavit not later than September 1 of each year that provides: (1) name (legal and any D/B/A), address, and contact information of the business service user; (2) address of all locations within Texas served by a non-complaint telephone system; (3) a narrative of efforts demonstrating a good faith attempt to reprogram or replace non-compliant telephone systems; (4) a statement that compliance with this rule is unduly and unreasonably cost prohibitive; (5) the manufacturer and model number

[12] Available at http://www.statutes.legis.state.tx.us/Docs/HS/htm/HS.771A.htm. With regard to onsite notification, the Texas version of Kari's Law provides that the business service user "shall configure the telephone system or equivalent system to provide a notification to a central location on the site of the residential or business facility when a person within the residential or business facility dials 9-1-1 if the system is able to be configured to provide the notification without an improvement to the system's hardware. This subsection does not require a business service user to have a person available at the central location to receive a notification." *Id.*

> of each non-compliant telephone system and the estimated costs to reprogram or replace each system; (6) a projected date for compliance with Kari's Law and this rule; and (7) confirmation that the business service user agrees to or has placed an instructional sticker immediately adjacent to, and optionally on, each non-compliant telephone handset instructing the user how to access 9-1-1 service. The instructional sticker must be printed in at least 16-point boldface type, in a contrasting color using a font that is easily readable, and is written in English and Spanish.[13]

During the first year for waivers in Texas, statewide there were approximately 630 waivers submitted for systems with end point locations in various Texas 9-1-1 areas (often from older and smaller MLTS, but also from some large major national companies seeking more time to make their locations in Texas compliant). In the second year for waivers in Texas, statewide there were approximately 386 waivers submitted for systems with end point locations in various Texas 9-1-1 areas.[14] While the almost 40% decrease from the first year to the second year constitutes significant progress, it appears that some of the older non-compliant systems might remain in service for many years to come.

C. Routing

With regard to the issue of routing 9-1-1 calls to the designated PSAP or a MLTS not passing 9-1-1 calls beyond its own internal system, Texas statutes provide that 9-1-1 calls are to route to the designated PSAP for the geographic region from which the 9-1-1 call was made (putting aside certain extremely limited circumstances). In Texas, "9-1-1 service" means "a communications service *that connects users to a public safety answering point through a 9-1-1 system*." (Emphasis added)[15] In a consistent manner, federal law defines a "public safety

[13] Available at http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=1&pt=12&ch=251&rl=Y.
[14] Waiver data for the first and second year waivers are available at http://www.texas911.org/KarisLaw.
[15] *Cf.*, Texas Health and Safety Code Ann. Section 771.001(6). See also, Texas Remedies Code ("An individual commits an offense if the individual knowingly prevents or interferes with another individual's ability to place an emergency call or to request assistance, including a request for assistance using an electronic communications device, in an emergency from a law enforcement agency, medical facility, or other agency or entity the primary purpose of which is to provide for the safety of individuals").

answering point" or "PSAP" to mean "a facility that has been designated to receive 9–1–1 calls and route them to emergency service personnel."[16]

D. Precision of Location Information

With regard to the precision of 9-1-1 location information, from a strict technology perspective, newer MLTS appear generally to have available capabilities to obtain more precise location information.[17] However, there does not appear to be generally available public information as to the actual use of those available capabilities to provide more precise location information. As a general matter the precision of location information parameters in the NENA MLTS Model Legislation 2015 are well considered, and present a balanced approach to meeting consumer expectations for 9-1-1 calls from MLTS.[18]

IV. Business Arrangements

The Commission seeks comment on the typical commercial arrangements for MLTS.[19] In a legacy wireline 9-1-1 MLTS environment, typical commercial arrangements could vary by the

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[16] *See* 47 U.S.C. 615b (emphasis added).

[17] *See*, https://www.cisco.com/c/en/us/products/unified-communications/emergency-responder/index.html:

> Coupled with Cisco Unified Communications Manager, Cisco Emergency Responder surpasses traditional PBX capabilities by introducing user or phone moves and changes at no cost, and dynamic tracking of user and phone locations for emergency 9-1-1 safety and security purposes.
>
> Cisco Emergency Responder includes the following features:
>
> - Real-time location-tracking database and enhanced routing capabilities
> - Supports automatic notification of customer security personnel when an emergency call is in progress and provides the caller's location
> - Requires no administrative support for moving phones or staff from one location to another

See also, http://www.redskye911.com/sites/default/files/E911ManagerDatasheet.pdf:

> TRACKING IP PHONES: The mobility made possible by IP (SIP and H.323) phones presents challenges for administrators in tracking the location of users and providing E911 service. E911 Manager features four distinct, automated methods of tracking UP phones allowing real-time location updates. … NETWORK REGIONS/IP RANGES … LAYER 2 PORT LEVEL DISCOVERY … MOBILE SOFTPHONE AND LOCATION TRACKING … WIFI PHONE TRACKING ….

[18] *See*, NENA MLTS Model Legislation 2015 at pp. 8-10 (Special Location Provisioning Obligations for Covered MLTS and Special Location Provisioning Obligations for Grandfathered MLTS (available at https://c.ymcdn.com/sites/www.nena.org/resource/collection/C3D071C2-FACD-41CB-A09C-354888272EF8/MLTS_2015.pdf).

[19] NOI at ¶29.

demarcation points, size of the MLTS, and number of different locations served (e.g., a central office hosted Centrex solution might be provisioned differently than a customer premises PBX located at the MLTS location, and the same solutions could be provisioned somewhat differently depending on the specific MLTS configuration), with the Automatic Number Identification ("ANI") being station-level callback or a designated callback and with the Automatic Location Information ("ALI") either being sent as part of the local exchange company (LEC) service order system in some cases or via separate arrangements separately purchased by the MLTS customer via tariff, guidebook, or competitive contract.[20] Similarly, in an Interconnected VoIP MLTS using SIP trunking or a more hosted solution via a NENA i2 VPC using SIP PIDF-LO and an Emergency Services Gateway Provider (ESGW), typical commercial arrangements could vary by the demarcation points, size of the MLTS, and number of different locations served, and there could be different options available for registering location information.[21] In addition, there are hybrid MLTS that may use either TDM or IP, or potentially use both depending on circumstances.[22] Because many MLTS product offering are no longer price regulated and because of various potential TDM, IP, and hybrid systems and the various configurations that could potentially be deployed, the most accurate information on business arrangements and pricing should probably come from the vendor community.

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[20] *Cf.*, AT&T Texas at Sheet 6 Database at monthly recurring charge per 10 records per PSP at $0.70, non-recurring charge $5.05, and administrative site database set up charge of $155 (available http://cpr.att.com/pdf/tx/b006.pdf), and AT&T Texas at Sheet 18, Inform 911 per SmartTrunk serving arrangement $150 monthly recurring charge and $200 non-recurring charge (available at http://cpr.att.com/pdf/tx/0017-0002.pdf).

[21] *Cf.*, "How Does E911 Work with Nextiva Trunking? … To set E911 information on your Nextiva SIP Trunk, log in to your account. Once you are Logged in, click Devices and then View Details." (available at https://www.nextiva.com/support/articles/how-does-e911-work-with-nextiva-trunking.html).

[22] *See*, https://downloads.avaya.com/css/P8/documents/101005793:

> IP Office provides a hybrid PBX with both Time Division Multiplexing (TDM) and IP telephony with trunk support, used in either mode or both concurrently. IP Office has data capabilities built-in, providing IP routing, switching and firewall protection, between LAN and WAN (LAN2).

V. Potential NG9-1-1 Capabilities of MLTS, and the Impact of IP-Based NG9-1-1 Transition on MLTS

The Commission seeks comment on the potential NG9-1-1 capabilities of MLTS and the impact of the IP-based NG9-1-1 transition on MLTS.[23] As some MLTS are currently sending PIDF-LO to an ESGW where it gets converted to TDM in order to interface with legacy 9-1-1 selective routers,[24] these IP MLTS should hopefully be more ready than others to interface with NG9-1-1 systems consistent with NENA i3 standards in the near future. It is anticipated that in a NG9-1-1 SIP environment that IP MLTS may often go through an Originating Service Provider ("OSP") or Third-Party via SIP connectivity to a NG9-1-1 system, sending PIDF-LO, and using the OSP's Location Information Server (LIS) to query the applicable Location Validation Function ("LVF") serving the NG9-1-1 system. But it is also possible that sometimes an IP MLTS may instead seek to directly connect and interface with NG9-1-1 systems using some or all of those components.

There does not appear to be much readily available public documentation and confirmation testing of IP MLTS directly and/or indirectly interfacing via SIP, PIDF-LO, LIS, and LVF components with NG9-1-1 systems. Increased public documentation and confirmation testing of IP MLTS interfacing with NG9-1-1 system may be appropriate and beneficial to all interested 9-1-1 stakeholders. The Greater Harris County 9-1-1 Emergency Network ("GHC 9-1-1"), which serves more than 20% of the Texas population (approximately 5.5 million people), is currently in the process of working to migrate OSPs to GHC 9-1-1's transitional NG9-1-1 platform that will

[23] NOI at ¶30.

[24] *See, e.g.*, LEVEL 3® VOICE COMPLETE WITH ADVANCED E-911 SERVICE ("Level 3 Voice Complete service with advanced E-911 was developed in conjunction with Microsoft to take advantage of Skype for Business's unique capability to track end-user location information through the active directory and pass it to Level 3's nationwide SIP network with direct connections to the 911 infrastructure. Skype for Business embeds the pre-loaded location information using the PIDF-LO abilities of the SIP 911 call, which Level 3 uses to automatically populate the VoIP Positioning Center (VPC) in accordance to NENA I-2.5 standards and route the call to the appropriate local 911 PSAP") (available at http://www.level3.com/-/media/files/brochures/en_voice_br_vccmplt_911.pdf).

use NENA i3 standards (to the extent they can be supported today), and SIP connectivity is expected to be an available option in 2018.[25] If the Commission and/or other interested 9-1-1 stakeholders wish to do some public documentation and confirmation testing of IP MLTS directly and/or indirectly interfacing via SIP, PIDF-LO, LIS, and LVF components with NG9-1-1 systems, then in 2018 GHC 9-1-1, within reasonable parameters and availability of resources, is willing to host and perform public documentation and confirmation testing of IP MLTS directly and/or indirectly interfacing via SIP, PIDF-LO, LIS, and LVF components with NG9-1-1 systems.

VI. Conclusion

The Texas 9-1-1 Entities appreciate the opportunity to provide the foregoing initial comments on these NOI matters, and respectfully request that the Commission take action in a manner consistent with these comments.

[25] *See*, Notification GHC-002-20170428 at page 9 (available at http://airbus-dscomm.com/pdf/osp/GHC.002.20170428.pdf):

> … *Frequently Asked Questions and Answers* …
> Q: Our Company is moving to VoIP and we have an IP capable softwitch. Can the ESInet allow me to connect using IP?
> A: Yes. The ESInet will fully support IP connection arrangements. Many popular switches have certified support. MetaSwitch, Taqua, GenBand and others can establish direct connections to the ESInet. Contact Airbus to discuss these options. …

Respectfully submitted,

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On behalf of the Texas Commission on State Emergency Communications

Elizabeth Cole
President

On behalf of the Municipal Emergency Communication Districts Association

<u>On the comments</u>:
Richard A. Muscat
Bexar Metro 9-1-1 Network District

November 15, 2017

ATTACHMENT A

Class of Service

Austin FD
Austin PD
Austin/Travis CO EMS
Bastrop County Emergency Communications
Blanco County Sheriff
(25 more PSAP s selected)
Year: 2015

Report Date:	10/23/2017 07:04:51
Report Date From:	01/01/2015
Report Date To:	09/30/2017
Period Group:	Year
Call Type:	911 Calls
Abandoned Filters:	Include Abandoned
Agency Affiliation:	All

Class	PSAP Call Count	%	
BUSN	82960	5.14%	
CELL	0	0.00%	
CNTX	1296	0.08%	
COIN	6505	0.40%	
MOBL	879	0.05%	
No Class of Service	20450	1.27%	
OTHER	56	0.00%	
PAYP	95	0.01%	
PBX	61836	3.83%	
RESD	44457	2.76%	
TLMA	2447	0.15%	
Unparsed 911	43	0.00%	
VBUS	21450	1.33%	
VOIP	6706	0.42%	
VRES	36563	2.27%	
W911	0	0.00%	
WPH1	3	0.00%	
WPH2	466068	28.89%	
WRLS	861288	53.39%	
TOTALS	**1613102**		

Class of Service

Austin FD
Austin PD
Austin/Travis CO EMS
Bastrop County Emergency Communications
Blanco County Sheriff
(25 more PSAPs selected)

Year: 2016

Report Date:	10/23/2017 07:04:51
Report Date From:	01/01/2015
Report Date To:	09/30/2017
Period Group:	Year
Call Type:	911 Calls
Abandoned Filters:	Include Abandoned
Agency Affiliation:	All

Class	PSAP Call Count	%	
BUSN	76779	5.00%	
CELL	0	0.00%	
CNTX	1377	0.09%	
COIN	3651	0.24%	
MOBL	823	0.05%	
No Class of Service	13872	0.90%	
OTHER	6	0.00%	
PAYP	22	0.00%	
PBX	73426	4.79%	
RESD	36544	2.38%	
TLMA	2398	0.16%	
Unparsed 911	49	0.00%	
VBUS	19691	1.28%	
VOIP	14971	0.98%	
VRES	34718	2.26%	
W911	0	0.00%	
WPH1	0	0.00%	
WPH2	507360	33.07%	
WRLS	748680	48.79%	
TOTALS	**1534367**		

Class of Service

Austin FD
Austin PD
Austin/Travis CO EMS
Bastrop County Emergency Communications
Blanco County Sheriff
(25 more PSAP s selected)

Year: 2017

Report Date: 10/23/2017 07:04:51
Report Date From: 01/01/2015
Report Date To: 09/30/2017
Period Group: Year
Call Type: 911 Calls
Abandoned Filters: Include Abandoned
Agency Affiliation: All

Class	PSAP Call Count	%	
BUSN	52915	4.79%	
CELL	0	0.00%	
CNTX	757	0.07%	
COIN	2064	0.19%	
MOBL	555	0.05%	
No Class of Service	11603	1.05%	
OTHER	2	0.00%	
PAYP	18	0.00%	
PBX	63637	5.76%	
RESD	24217	2.19%	
TLMA	1823	0.17%	
Unparsed 911	133	0.01%	
VBUS	18460	1.67%	
VOIP	13259	1.20%	
VRES	22674	2.05%	
W911	0	0.00%	
WPH1	0	0.00%	
WPH2	366396	33.18%	
WRLS	525874	47.62%	
TOTALS	**1104387**		

ATTACHMENT B

Bexar Metro 9-1-1 Calls by Class of Service Year to Date 2017

BUSN	CNTX	COIN	MOBL	NA	NO CLS SERVICE	PBX	PBXb	PBXr	RESD	RESX	TLMA	TELM	UNPARSED 911	VBUS	VENT	VMBL	VNOM	VOIP	VRES	W911	WPH1	WHP2	WRLS	TOTAL
53,828	351	6,581	5	20	6,232	0	16,326	68	30,829	7	2	8	25	14,355	90	27	179	20,022	23,669	0	7	609,838	478,782	1,261,327
4.27%	0.03%	0.52%	0.00%	0.00%	0.49%	0.00%	1.29%	0.01%	2.44%	0.00%	0.00%	0.00%	0.00%	1.14%	0.01%	0.00%	0.01%	1.59%	1.88%	0.00%	0.00%	48.35%	37.96%	100.00%